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# Executive Summary

Under the American Recovery & Reinvestment Act (ARRA), the Georgia Technology Authority (GTA) received $5.2 million to facilitate a State Broadband Initiative through December 2014. A portion of these funds was set aside for the development of Regional Digital Economy Plans with Georgia's Regional Commissions.

The Northeast Georgia Regional Commission (NEGRC) is governed by a Council representing the 12 counties within its 3,260-square-mile service area. The NEGRC Planning & Government Services Division led the digital economy planning process with input from the Workforce Development and Aging divisions.

The purpose of the Northeast Georgia Digital Economy Plan is to document the resources and unmet needs of digital assets, broadband infrastructure, services, and related technology utilization and present strategies to fill identified gaps. Plan updates were provided regularly through a dedicated page under the Planning & Government Services Division tab on the NEGRC website at <http://www.negrc.org/resource-1.php?page_ID=1406229947>.

The planning process consisted of three primary components:

**Data Collection & Analysis**

NEGRC compiled data derived from GTA, existing regional planning documents (updated for this planning process), and other resources to help identify quantifiable and empirical strengths, weaknesses, opportunities, and challenges to a vibrant regional digital economy. Included in this effort were periodic updates to Community Anchor Institution (CAI) information within the 12-county area.

**Stakeholder Engagement**

Digital technology application was evaluated through a stakeholder engagement process with agencies and organizations working within the four State priority areas: Economic Development, Education, Public Safety, and Healthcare. NEGRC utilized several methods to obtain input from stakeholders. This process included the dissemination of web-based questionnaires for residents and businesses, presentations to regional groups, meetings with individuals, and email communications.

**Strategy Development**

The Planning & Government Services Committee of the NEGRC Council provided oversight over the strategies developed during the planning process. Additionally, NEGRC engaged an email listserv of individuals who, during the stakeholder engagement process, indicated an interest in receiving updates and invitations to comment as the plan took shape.

The Northeast Georgia Digital Economy Plan highlighted a need for meaningful coordination at the regional level and strategic and capital planning at the local and agency level. These needs may be addressed through the implementation of the four strategies detailed in this plan:

* Incorporate digital technology plan elements into the local comprehensive planning process.
* Develop “dig once” policies for local adoption.
* Develop regional coordination and sharing agreements for technologies and infrastructure.
* Identify specific training and education needs at an organization/agency level, and develop programs to address those needs.

# Introduction

[placeholder text from Bill/GTA]

The Northeast Georgia region comprises 12 counties and 54 municipalities, covering approximately 3,260 square miles. While the easternmost edge of the region remains largely rural, the Northeast Georgia experiences development pressures from the Atlanta metropolitan region to the immediate west.

The Northeast Georgia Regional Commission (NEGRC) serves this region. Created in 1963, the agency is a resource for planning, economic development, grant writing/administration, workforce training, and aging services. The digital economy planning process was facilitated by staff in the Planning & Government Services Division.

Map 1- Northeast Georgia Region

\\plansrv\GISData\Current Projects\GTA\MISC Maps\For Document\Map 1 (Detailed Overview).tif

NEGRC initiated the digital economy planning process in September 2013. The draft was circulated to stakeholders for review in August 2014, and submitted to GTA and the Middle Georgia Regional Commission for review in September 2014.

# Regional Stakeholders

The Planning & Government Services Committee of the NEGRC Council served as the advisory committee for the Northeast Georgia Digital Economy Plan, and was provided with regular updates on progress made.

NEGRC engaged a variety of stakeholders representing the four State priority areas of Economic Development, Education, Public Safety, and Healthcare. Presentations were given to the following groups at their regularly-held meetings from January through April 2014. At these meetings, feedback was solicited in the form of hard-copy questionnaire forms, which included an option to sign up for email updates on the planning process (see Appendix III).

* NEGRC Council
* Northeast Georgia Regional Educational Service Agency (RESA) Curriculum Directors
* Northeast Georgia Aging and Disability Resource Connection(ADRC)
* Northeast Georgia Region 10 Emergency Medical Services Council
* Northeast Georgia Workforce Investment Board (WIB)
* Joint Development Authority of Northeast Georgia
* Regional Senior Center Directors

NEGRC staff had hoped for greater engagement from elected officials and/or administrative staff within city and county governments during the stakeholder engagement process, but was able only to solicit such input from three cities (Auburn, Porterdale, and Watkinsville). Staff within specific government-related departments or organizations (e.g. public safety, senior centers, and school systems) was more responsive. (See the Section III Appendix for a qualitative analysis of agency/organization questionnaire responses.)

During the planning process, input was also obtained through meetings and conversations with the following:

* Brian K. Thompson, MonroeAccess.net
* Lanier Dunn, ElbertonNET
* Paul Chambers, AT&T
* Robert Oakes, Georgia Public Web
* Jim Flannery, Four Athens
* Bryan Zulko, USDA-Rural Development
* UGA Carl Vinson Institute's Office of Information Technology Outreach Services (ITOS)
  + David Holcomb, Eric McRae, Mike Perkins, Jimmy Nolan
* Greg Laudeman, Greg Laudeman Consulting

NEGRC created and publicized two online questionnaires to gather information about how residents and businesses in Northeast Georgia use digital technologies. From February through April 2014, NEGRC collected 96 business responses and 448 resident responses. For both questionnaires, the highest number of responses came from Walton County, with 33% (32) of business responses and 24% (106) of resident responses. The second highest number of resident responses came from Jasper County, at 19% (87). Nearly two-thirds (62%) of resident respondents live in a rural area. NEGRC staff expected greater engagement within Athens-Clarke County, given its relative concentration of commerce and population, but was unable to increase the response rate even after repeated social media postings and email blasts. (See the Section III Appendix for questionnaire results.)

These outreach efforts, combined, directly informed the SWOC analysis and identification of strategic focus areas.

# Economic Summary

During FY2013, NEGRC facilitated the development of a Comprehensive Economic Development Strategy (CEDS), building on the *Northeast Georgia Plan 2035* developed during FY2011 and FY2012 per the regional planning standards and procedures established by the Georgia Department of Community Affairs (DCA). The following tables offer an update to much of the data presented in *2012 Northeast Georgia Comprehensive Economic Development Strategy*, using the most current information available.[[1]](#footnote-1) [[2]](#footnote-2)

## Top 10 Sectors (2013)

Table 1

|  |  |  |
| --- | --- | --- |
| Rank | Northeast Georgia Region (4th Quarter) | Georgia (Year) |
| 1 | Government | Government |
| 2 | Trade/Transportation/Utilities | Retail Trade |
| 3 | Manufacturing | Health Care and Social Services |
| 4 | Education and Health Services | Accommodation and food services |
| 5 | Leisure and Hospitality | Manufacturing |
| 6 | Professional and Business Services | Administrative/waste services |
| 7 | Construction | Professional, scientific/tech services |
| 8 | Financial Activities | Wholesale Trade |
| 9 | Other Services | Finance and insurance |
| 10 | Natural Resources, Mining and Agriculture | Construction |
| Sources: Georgia Department of Labor Area Labor Profile for Northeast Georgia; Georgia Department of Labor, Labor Market Statistics, Employment and Wages Program for 2013 | | |

## Employment Wage Statistics (2013)

Wages for Northeast Georgia fall below wages statewide:

Table 2

|  |  |  |  |
| --- | --- | --- | --- |
|  | Average Hourly Wage | Average Weekly Wage | Average Annual Wage |
| Northeast Georgia  (4th Quarter) | $17.98 | $719 | $37,388 |
| Georgia (Yearly) | $22.48 | $899 | $46,748 |
| Sources: Georgia Department of Labor Area Labor Profile for Northeast Georgia; Georgia Department of Labor, Labor Market Statistics, Employment and Wages Program for 2013 | | | |

## Unemployment Rate

Northeast Georgia’s unemployment rate has been steadily declining since the high of near 10% during the recession of 2008/2009. It is currently declining at a faster rate than the both state of Georgia and the United States over the past two years (2012 and 2013), and the unemployment rate for 2013 was below both national and state averages.

Table 3

|  |  |  |  |
| --- | --- | --- | --- |
|  | % 2012 | % 2013 | % Change |
| Northeast Georgia | 8.3 | 7.3 | -11.5 |
| Georgia | 9.0 | 8.2 | -9.4 |
| United States | 8.1 | 7.4 | -8.4 |

Figure 1

Source: Georgia Department of Labor, U.S. Bureau of Labor Statistics

## Opportunity Zones

According to DCA, as of July 2014, the following twelve Northeast Georgia communities have designated Opportunity Zones:

* Athens-Clarke County
* City of Auburn
* City of Commerce
* City of Covington
* City of Elberton
* City of Greensboro
* City of Madison
* City of Monroe
* City of Porterdale
* City of Social Circle
* City of Union Point
* Walton County

Several additional Northeast Georgia communities have fulfilled the application requirements for Opportunity Zone designation, and are awaiting a response from DCA.

## Job Tax Credits

In 2014, the 159 Georgia counties have been re-ranked into four tiers based on unemployment rate, per capita income, and percentage of residents with incomes below the poverty level. A county’s tier ranking determines the base number of job tax credits available to businesses engaged in manufacturing, warehousing and distribution, processing, telecommunications, broadcasting, tourism, and research and development industries. All businesses, including retail operations, within designated Opportunity Zones are also eligible for these tax credits at the Tier 1 level. In addition, all 12 Northeast Georgia counties are eligible for an additional $500 tax credit per job created, as each is located within the jurisdiction of a Joint Development Authority.

* Tier 1 ($3,500 credit per job, minimum 5 new jobs): Clarke, Elbert
* Tier 2 ($2,500 credit per job, minimum 10 new jobs): Jasper, Newton
* Tier 3 ($1,250 credit per job, minimum 15 new jobs): Barrow, Greene, Jackson, Madison, Morgan, Oglethorpe, Walton
* Tier 4 ($750 credit per job, minimum 25 new jobs): Oconee

## Joint Development Authorities

All twelve counties in the region fall under the jurisdiction of at least one of the five Joint Development Authorities (JDA) which crisscross the region: **Georgia Biosciences** (Athens-Clarke, Barrow and Oconee Counties); **Dekalb/Newton/Gwinnett**, **Northeast Georgia** (Athens-Clarke, Barrow, Elbert, Jackson, Madison, Oconee, and Oglethorpe Counties), **Jasper/Morgan/Newton/Walton**, and **Lake Oconee Area** (Greene). Additionally, the four northernmost counties—Barrow, Elbert, Jackson and Madison Counties—fall under the jurisdiction of the **Appalachian Regional Commission**.

**Map 2—Joint Development Authorities**

****

*Source: NEGRC Databases*

## Major Employers

According to the most recent Georgia Department of Labor Area Profile, the ten largest employers in Northeast Georgia in the third quarter of 2013 were as follows (listed alphabetically):

* Athens Regional Medical Center
* Chico’s Distribution Services, LLC
* Harrison Poultry, Inc.
* Pilgrim’s Pride Corporation
* Publix Supermarkets, Inc.
* The Kroger Company
* The University of Georgia
* Walmart
* Wayne Poultry
* West Side Station\*

\*No information available on this outside GADOL report.

**Map 3—Major Employers**

Sources: Georgia Department of Labor Area Labor Profile for Northeast Georgia

# Workforce and Demographic Summary

## Population Forecasts Through 2030

By 2030, Northeast Georgia is expected to grow substantially in population. Every county is forecast to grow between 2010 and 2030. Athens-Clarke County will cease to be the most populous in Northeast Georgia by 2015, when Newton County is expected to surpass it. By 2030, Athens-Clarke will be the 4th most populous county behind Newton, Walton, and Barrow, respectively. Seven of the twelve counties are forecast to grow at a faster rate than the region (81.8%) during this timeframe. Sometime between 2025 and 2030, the population in Northeast Georgia is forecast to exceed the one million mark.

Table 4

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| County | 2010 | 2015 | 2020 | 2025 | 2030 | Rate |
| Barrow | 69,367 | 90,162 | 107,798 | 128,994 | 151,417 | **118.28%** |
| Clarke | **116,714** | 123,967 | 131,257 | 139,121 | 147,373 | 26.27% |
| Elbert | 20,166 | 20,906 | 21,136 | 21,312 | 21,427 | 6.25% |
| Greene | 15,994 | 18,640 | 20,971 | 23,499 | 26,134 | 63.40% |
| Jackson | 60,485 | 77,528 | 90,713 | 105,954 | 123,728 | **104.56%** |
| Jasper | 13,900 | 17,344 | 20,237 | 23,572 | 27,065 | **94.71%** |
| Madison | 28,120 | 31,847 | 34,796 | 38,014 | 41,029 | 45.91% |
| Morgan | 17,868 | 22,019 | 24,787 | 27,832 | 31,090 | 74.00% |
| Newton | 99,958 | **129,789** | **157,414** | **191,000** | **227,537** | **127.63%** |
| Oconee | 32,808 | 41,010 | 48,233 | 56,412 | 65,828 | **100.65%** |
| Oglethorpe | 14,899 | 17,601 | 20,620 | 24,127 | 28,081 | **88.48%** |
| Walton | 83,768 | 103,882 | 118,742 | 135,756 | 153,053 | **82.71%** |
| REGION | 574,047 | 694,695 | 796,704 | 915,593 | 1,043,762 | 81.83% |
| Sources: US Census Bureau 2010 Decennial Census; Governor’s Office of Planning and Budget “Georgia 2030: Population Projections”, March 12, 2010: <http://www.georgialibraries.org/lib/construction/georgia_population_projections_march_2010.pdf> (last accessed 7/24/2014)  Note: Bold under year forecasts indicates most populous county. Bold under “Rate” indicates those counties forecast to grow at a faster rate than the region (81.83%) during 2010 to 2030. | | | | | | |

**Map 4—Population Density**

Source: US Census Bureau 2010 Decennial Census—Block Level Data

Figure 2

Source: US Census Bureau 2010 Decennial Census; Governor’s Office of Planning and Budget “Georgia 2030: Population Projections”, March 12, 2010:

[**http://www.georgialibraries.org/lib/construction/georgia\_population\_projections\_march\_2010.pdf**](http://www.georgialibraries.org/lib/construction/georgia_population_projections_march_2010.pdf) (last accessed 7/24/2014)

## Workforce Summary

Significant gaps exist region-wide in workforce supply (employed persons in the region age 16 and older) and job supply. Only Athens-Clarke County has a positive gap in supply versus demand at +0.4%; slightly more people are coming into Athens-Clarke County for employment than are leaving. The remaining 11 counties see significant portions of their available workforce leaving the county for employment, with several seeing well over half their available work force having to commute outside the county for employment.

Table 5

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | Gap | |
|  | **Workforce (Supply)** | **Jobs (Demand)** | **#** | **%** |
| Barrow | 31,360 | 16,789 | (14,571) | -46.5% |
| Clarke | 64,858 | 65,091 | 233 | 0.4% |
| Elbert | 7,930 | 5,786 | (2,144) | -27.0% |
| Greene | 6,610 | 5,239 | (1,371) | -20.7% |
| Jackson | 25,728 | 19,498 | (6,230) | -24.2% |
| Jasper | 5,703 | 2,072 | (3,631) | -63.7% |
| Madison | 15,101 | 3,046 | (12,055) | -79.8% |
| Morgan | 8,389 | 5,926 | (2,463) | -29.4% |
| Newton | 43,376 | 20,557 | (22,819) | -52.6% |
| Oconee | 18,632 | 8,981 | (9,651) | -51.8% |
| Oglethorpe | 7,732 | 1,799 | (5,933) | -76.7% |
| Walton | 37,198 | 18,904 | (18,294) | -49.2% |
| REGION | 272,617 | 173,688 | (98,929) | -36.3% |
| Source: Georgia Department of Labor Area Labor Profile (June 2014) for 2012/2013 | | | | |

## Educational Attainment

Nearly 26,000 persons were enrolled in the high school in public school systems throughout the Northeast Georgia in the 2012/2013 school year (as of March 1, 2013), and approximately 5,100 graduated. Approximately 82% of the region has completed high school, and slightly under 30% of the region has received an associate’s degree or higher. Four counties (Athens-Clarke, Jasper, Newton, and Oconee) have a higher percentage of high school graduates than the region as a whole, though most of the counties sit around the region average. Athens-Clarke and Oconee stand out with approximately 45% each of the population receiving an associate’s degree or higher. This is likely attributable to the presence of and proximity to the main campus of the University of Georgia.

Table 6

|  |  |  |
| --- | --- | --- |
|  | High School Graduate  or Greater | Associate Degree  or Greater |
| Barrow | 79.5% | 23.5% |
| Clarke | **85.1%** | **45.5%** |
| Elbert | 75.9% | 16.9% |
| Greene | 76.3% | 25.9% |
| Jackson | 79.9% | 24.6% |
| Jasper | **81.8%** | 24.5% |
| Madison | 74.6% | 17.8% |
| Morgan | 80.2% | **29.9%** |
| Newton | **84.2%** | 26.5% |
| Oconee | **84.9%** | **45.3%** |
| Oglethorpe | 76.7% | 21.8% |
| Walton | 81.1% | 25.3% |
| REGION | 81.7% | 29.5% |
| Source: ESRI Business Analyst Online (BAO) “Community Profile” report  Note: Bold text indicates above region’s percentage. | | |

## By Grade and Age Group (2012)

Table 7

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 18-24  Years | 25-34  Years | 35-44  Years | 45-64  Years | 65+  Years | All  Ages |
| Elementary | 1.9% | 4.0% | 3.5% | 5.1% | 14.6% | 5.5% |
| Some High School | 12.1% | 11.3% | 9.1% | 11.9% | 14.2% | 11.7% |
| High School/GED | 30.1% | 27.7% | 31.5% | 33.5% | 34.0% | 31.6% |
| Some College | 45.9% | 22.7% | 23.2% | 20.8% | 15.2% | 25.0% |
| College Grad (2-Year) | 2.8% | 6.7% | 7.5% | 6.9% | 3.1% | 5.7% |
| College Grad (4-Year) | 6.7% | 18.2% | 15.6% | 12.3% | 9.6% | 12.6% |
| Post Graduate Studies | 0.1% | 9.2% | 9.6% | 9.7% | 9.2% | 8.0% |
| Source: U.S. Census Bureau, 2012 American Community Survey (ACS) 5-Year Estimate | | | | | | |

## High School Graduates (2013)

Table 8

|  |  |  |
| --- | --- | --- |
|  | HS Graduates  (2013)\* | HS Enrollment  (2013)\* |
| Barrow | 686 | 3,628 |
| Clarke | 534 | 2,952 |
| Elbert | 155 | 842 |
| Greene | 78 | 530 |
| Jackson | 652 | 3,115 |
| Jasper | 103 | 566 |
| Madison | 261 | 1,352 |
| Morgan | 202 | 961 |
| Newton | 964 | 5,081 |
| Oconee | 494 | 2,044 |
| Oglethorpe | 134 | 678 |
| Walton | 861 | 4,163 |
| REGION | 5,124 | 25,912 |
| (\*)Public school systems only Sources: Georgia Department of Education, Enrollment by Ethnicity/Race, Gender and Grade Level (PK-12) for March 1, 2013; Georgia Department of Labor Area Labor Profile (June 2014) for 2012/2013 | | |

## Educational and Workforce Development Resources

Northeast Georgia has a wealth of educational resources, with fourteen college and university campuses in 10 different cities (in 9 out of 12 counties). In addition to the University of Georgia in Athens, the region also plays host to three technical college systems (Athens Tech, Georgia Piedmont Tech, Southern Crescent Tech, and Lanier Tech). Newton County contains a branch of Emory University (Oxford College) and Troy University, an Alabama-based university with campuses in seven other states (Alabama and Georgia, as well as Florida, North Carolina, South Carolina, Tennessee, Texas, and Virginia) as well as three international locations in Japan, South Korea, and Vietnam. The region also has 140 public[[3]](#footnote-3) and 8 private[[4]](#footnote-4) K-12 schools as of the 2012/13 school year.

|  |  |
| --- | --- |
| College/University | Location |
| University of Georgia | Athens |
| Athens Technical College (Main Campus) | Athens |
| Athens Technical College (Elbert) | Elberton |
| Athens Technical College (Greene) | Greensboro |
| Athens Technical College (Walton) | Monroe |
| Piedmont College | Athens |
| Oxford College of Emory University | Oxford |
| Troy University | Covington |
| Georgia Perimeter College | Covington |
| Georgia Piedmont Technical College | Covington |
| University of North Georgia | Watkinsville |
| Lanier Technical College (Jackson) | Commerce |
| Lanier Technical College (Barrow) | Winder |
| Southern Crescent Tech (Jasper) | Monticello |
| Sources: Northeast Georgia Plan 2035: Regional Assessment 2011; 2012 Northeast Georgia Comprehensive Economic Development Strategy; Technical College System of Georgia. | |

**Map 5—Educational Resources**



Sources: Technical College System of Georgia; Georgia Department of Education; Georgia Independent Schools Association; NEGRC databases.

Several programs at the technical colleges have seen significant increases in numbers, greater than 100%, of graduates from 2011 to 2013. The greatest increase has been in Emergency Medical Technicians (or Paramedics) at over 600%, Health Information/Medical Records Technology at over 500%, and Data Processing Technology at over 200%.

Table 9

|  |  |  |  |
| --- | --- | --- | --- |
| Tech College Program | 2011 | 2013 | % Change |
| Automobile/Automotive Mechanics Technology/Technician | 1,375 | 2,481 | **80.4%** |
| Business Administration and Management, General | 226 | 477 | **111.1%** |
| Carpentry/Carpenter | 9 | 19 | **111.1%** |
| Criminal Justice/Safety Studies | 842 | 1,705 | **102.5%** |
| Data Processing and Data Processing Technology/Technician | 138 | 530 | **284.1%** |
| Emergency Medical Technology/Technician (EMT Paramedic) | 124 | 889 | **616.9%** |
| Health Information/Medical Records Technology/Technician | 24 | 146 | **508.3%** |
| Hospitality Administration/Management, General | 168 | 308 | **83.3%** |
| Human Resources Management/Personnel Administration, General | 64 | 146 | **128.1%** |
| Machine Shop Technology/Assistant | 232 | 396 | **70.7%** |
| Source: Georgia Department of Labor Area Labor Profile (June 2014) for 2012/2013 | | | |

Career centers for workforce development are located in Athens, Greensboro and Covington. The NEGRC Workforce Development Division lists several providers for workforce development training throughout the region as of June 2014.

Table 10

|  |  |
| --- | --- |
| Workforce Training | Location |
| Athens Technical College | Athens |
| Bread for Life | Watkinsville |
| CDL of Georgia | Winder |
| Georgia Perimeter College | Covington |
| Georgia Piedmont Technical College | Covington |
| Goodwill of North Georgia | Athens |
| Lanier Technical College | Winder |
| Northeast Georgia RESA | Winterville |
| University of Georgia | Athens |
| (for more information about specific details and programs offered at these locations, see: <http://www.negrc.org/user_files//1402596825_WIA%20NE%20GA%20EPL%206.10.14.pdf>) | |

## Computer Utilization and Digital Readiness

In 2013, approximately 72% (153,679) of the region’s 213,096 households had a personal computer, approximately 83% (372,666) and approximately 54% (243,217) of the region’s adult population has internet access and broadband at home, respectively.

Table 11

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Households | Adult Population | Household Has  Personal Computer | | Adult Population Has  Internet Access | | Adult Population  Has  Broadband at Home | |
| Barrow | 24,665 | 51,890 | 18,297 | 74.2% | 44,078 | 84.9% | 28,845 | 55.6% |
| Clarke | 46,279 | 98,393 | 33,582 | 72.6% | 84,446 | 85.8% | 60,037 | 61.0% |
| Elbert | 8,090 | 15,634 | 4,520 | 55.9% | 10,915 | 69.8% | 5,429 | 34.7% |
| Greene | 6,791 | 13,295 | 4,419 | 65.1% | 10,143 | 76.3% | 5,919 | 44.5% |
| Jackson | 21,872 | 46,219 | 15,859 | 72.5% | 38,449 | 83.2% | 23,969 | 51.9% |
| Jasper | 5,039 | 10,540 | 2,984 | 59.2% | 7,611 | 72.2% | 3,922 | 37.2% |
| Madison | 10,697 | 22,097 | 6,814 | 63.7% | 16,711 | 75.6% | 8,765 | 39.7% |
| Morgan | 6,759 | 13,873 | 4,790 | 70.9% | 11,372 | 82.0% | 6,489 | 46.8% |
| Newton | 34,960 | 73,724 | 26,553 | 76.0% | 63,336 | 85.9% | 43,435 | 58.9% |
| Oconee | 12,062 | 25,183 | 10,167 | 84.3% | 23,009 | 91.4% | 17,288 | 68.6% |
| Oglethorpe | 5,701 | 11,679 | 3,559 | 62.4% | 8,666 | 74.2% | 4,504 | 38.6% |
| Walton | 30,181 | 63,416 | 22,135 | 73.3% | 53,930 | 85.0% | 34,615 | 54.6% |
| REGION | 213,096 | 445,943 | 153,679 | 72.1% | 372,666 | 83.6% | 243,217 | 54.5% |
| Source: ESRI Business Analyst Online (BAO) “Electronics and Internet Market Potential” report | | | | | | | | |

Household has Personal Computer

Figure 3

Source: ESRI Business Analyst Online (BAO) “Electronics and Internet Market Potential” report for the region.

Adult Population has Internet Access

Figure 4

Source: ESRI Business Analyst Online (BAO) “Electronics and Internet Market Potential” report for the region.

Adult Population has Broadband Access at Home

Figure 5

Source: ESRI Business Analyst Online (BAO) “Electronics and Internet Market Potential” report for the region.

# Infrastructure

## Broadband Service Providers

There are fifteen (15) known broadband internet services providers (ISPs) within Northeast Georgia. Of these, two are municipal governments (Elberton and Monroe). Though located in Hart County outside of the Northeast Georgia region, a small portion of the region is covered by Hart Telephone.

Table 12

|  |  |
| --- | --- |
| Provider | Location |
| AT&T | Dallas, TX |
| Bulldog Cable | Conyers, GA |
| Charter | Stamford, CT |
| Comcast | Philadelphia, PA |
| ElbertonNET | Elberton, GA |
| Georgia Public Web\* | Sandy Springs, GA |
| Hart Telephone | Hartwell, GA |
| Level 3 Communications | Broomfield, CO |
| Megapath | Costa Mesa, CA |
| MonroeAccess.net | Monroe, GA |
| [[5]](#footnote-5)Parker FiberNet\* | Summerville, GA |
| Southern Telecom, LLC\* | Atlanta, GA |
| TruVista | Chester, SC |
| Windstream | Little Rock, AR |
| Zayo Group\* | Boulder, CO |
| \*Participation in the State Broadband Mapping Initiative is voluntary, and these broadband service providers opted not to share data with the Georgia Technology Authority and Sanborn Map Company. NEGRC staff met with a representative from Georgia Public Web, a nonprofit provider, to learn about the services offered by the organization. | |

**Map 6—Fiber Lines in Region**

Source: Georgia Technology Authority Middle Mile Database

## Key Broadband Strengths

According to available provider data, the region is well covered in terms of both wireless and wireline internet connectivity.[[6]](#footnote-6) Less than 0.02% of the region’s population lacks wireless coverage and only slightly over 5% of the region lacks access to wireline coverage. This is reflected by questionnaire responses; 99% of respondents to the business questionnaire have access to internet at their location. Similarly, nearly 100% of respondents to the residential questionnaire have an internet-enabled device at home. Additionally, two cities in the region—Elberton and Monroe—offer municipal broadband access to its residences.

## Areas in Need

Regionally, while nearly 13% of the land area lacks access to any broadband (defined by GTA as having a maximum advertised download speed of 3Mbps or greater), this only accounts for slightly over 1% of the total population. So in terms of access to broadband internet, the region is pretty well covered. Gaps still exist, and infrastructure could stand to be improved to cover this roughly 477 square mile and 6,300 population gap. More notable, however, is lack of access to *adequate* broadband for individual/residential needs, and institutional/business needs. To determine what qualified as adequate and inadequate, the following information was consulted, adapted from The Open Technology Institute:

Table 13

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Bandwidth Needs of Individual Broadband Applications | | | | | | | | |
|  |  |  |  | **ADEQUATE** | | | | |
|  | **56Kbps** | **768Kbps** | **1Mbps** | **10Mbps** | **20Mbps** | **50Mbps** | **100Mbps** | **1Gbps** |
| **Download MP3  Music File (4MB)** | Poor (10 min) | OK (42 sec) | Good (32 sec) | Good (3 sec) | Best (1 sec) | | | |
| **Online Software Purchase (500MB)** | Poor (20 hrs) | Poor (87 min) | Poor (67 min) | OK (7 min) | Good (4 min) | Good (80 sec) | Good (40 sec) | Best (1 sec) |
| **HD Movie Download (5GB)** | Poor (9 days) | Poor (15 hrs) | Poor (12 hrs) | Poor (67 min) | OK (34 min) | Good (14 min) | Good (7 min) | Best 40 sec) |
| **Skype Video Call** | Poor | OK | Good | Best | | | | |
| **Stream HD Video** | Poor | | OK | Good | Best | | | |
|  |  |  |  |  |  |  |  |  |
| Bandwidth Needs of Institutional Broadband Applications | | | | | | | | |
|  |  |  |  |  |  | **ADEQUATE** | | |
|  | **56Kbps** | **768Kbps** | **1Mbps** | **10Mbps** | **20Mbps** | **50Mbps** | **100Mbps** | **1Gbps** |
| **Video Conference Between Two Users** | Poor | OK | | Good | Best | | | |
| **Online Higher Education Courses** | Poor | | | OK | Good | Best | | |
| **Video Conference with several users** | Poor | | | OK | Good | Best | | |
| **Telehealth (remote X-Rays,  HD video consultations** | Poor | | | | | Good | | Best |

For the purposes of analyzing areas in need of improved broadband infrastructure, NEGRC staff set a threshold of 10 Mbps and greater for individual/residential needs, which sets most applications at “Good” or better. For institutional/business applications, a 50 Mbps and greater threshold was established. For individual/residential applications, approximately 45% of the total area, and approximately 9% of the total population, lacks adequate bandwidth access (or lacks broadband access entirely). Most areas that lack adequate broadband bandwidth are in the eastern, more rural, counties, including Elbert, Madison, Oglethorpe, Morgan, Greene, Jasper, and southern Oconee (an area between Georgia Highway 15, and US Highway 129/441, south of Watkinsville), with pockets in Barrow, Jackson, Athens-Clarke, Walton, Newton, and the remaining portion of Oconee County. For institutional/business applications, approximately 62% of the total area, and approximately 20% of the total population, lacks adequate bandwidth access (or lacks broadband access entirely). These areas are geographically similar to those lacking adequate broadband for individual/residential use, but encompass larger swaths of the counties.

Table 14

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Total Area  (sq. mi) | Area with  Adequate  Bandwidth  (sq. mi) | Area  Lacking  Adequate  Bandwidth  (sq. mi) | Area  Lacking *Any*  Broadband (sq. mi) | % of Area of  Inadequate/ No Bandwidth |
| Individual/ Residential Applications | 3,665 | 2,007 | 1,183 | 476 | 45.3% |
| Institutional/ Business Application | 3,665 | 1,405 | 1,785 | 476 | 61.7% |

Table 15

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Total  Population  (2010) | Population  with Adequate  Bandwidth | Population  Lacking  Adequate  Bandwidth | Population  Lacking *Any* Broadband | % of Population  w/o Adequate or  No Broadband |
| Individual/ Residential Applications | 574,047 | 522,714 | 45,068 | 6,265 | 8.9% |
| Institutional/ Business Application | 574,047 | 457,711 | 110,071 | 6,265 | 20.3% |

**Map 7—Adequate Broadband for Individual/Residential Applications**



Source: Georgia Normalized Broadband Database (Dataset 8--December 2013)

**Map 8— Adequate Broadband for Institutional/Business Applications**



Source: Georgia Normalized Broadband Database (Dataset 8--December 2013)

## Key Broadband Weaknesses

According to available provider data, sizable swaths—greater than 10% of the land area—of half of the counties in the region, mostly the more rural eastern counties, lack wireline broadband connectivity. Approximately 45% of all connections in the region are via DSL. Cable internet connectivity is relegated chiefly to the western, more urban, counties. There is also a lack of choice throughout the region. In most counties, there are two main competing ISPs. Similarly, there is limited choice of broadband type for businesses and residences based on their location. The questionnaires indicate that there is a fair number of issues with consistency in connectivity. Fifty-one percent of business and 43% of residential respondents recently experienced non-weather related service disruptions lasting from one hour to one day. Additionally, less than half of residential respondents to the questionnaire think their internet speed is “OK” or better, while nearly one-quarter find it to be slow or “severely limiting”.

## Potential Partners for Infrastructure

The **United States Department of Agriculture (USDA)** provides several opportunities for infrastructure development in the form of grants and loans, primarily geared towards rural counties—defined as having a population of less than 35,000, seven of which are in the region as of April 2014.[[7]](#footnote-7)

The **Georgia Department of Community Affairs (DCA)** offers grants through several different programs for infrastructure and equipment purchases for governments, and governmental authorities.

The **Appalachian Regional Commission (ARC)** offers infrastructure grants for the governments within its jurisdiction, four counties and twenty-three cities of which are in the Northeast Georgia Regional Commission area.

**The University of Georgia,** and **Georgia Institute of Technology** operate university accelerators which offer various grants, loans, and awards for seed and early-stage capital for student and faculty entrepreneurs in technology, biotechnology, and life sciences.

The **United States Department of Commerce’s Economic Development Administration (EDA)** offers grants for infrastructure improvement for governmental entities.

The **Georgia Department of Education/Governor’s Office of Student Achievement—Connections for Classrooms** offers grants for infrastructure improvements for Public Local Educational Agencies (LEAs)—in other words, school districts.

A number of other private initiatives, investment funds, and independent not for profit groups offer discounts, grants, and matching funds for technology infrastructure development, primarily in rural counties. [[8]](#footnote-8)

# Capital

## Technology-Related Venture Capital Investments

Based upon data retrieved from GTA via the CB Insights venture capital database, the following investments within the Northeast Georgia region are highlighted as being specifically technology-related. This is not an exhaustive list; however, outreach to other sources did not result in additional information on venture capital investments.

Table 16

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Company | Company Description | City | Sector | Industry | Investors |
| Abeome | Abeome is a biotechnology firm dedicated to leveraging its technology that aims to enhance the speed, efficiency and stability of developing and producing monoclonal antibodies. | Athens | Healthcare | Biotechnology | Advanced Technology Development Center; Georgia Venture Partners |
| Bacterial Barcodes | Bacterial Barcodes is a subsidiary of Biomeriux Inc. and aims to provide the equipment, reagents and software for microbial genotyping of bacteria and fungi. Packaged together, these components are referred to as the DiversiLab System | Athens | Industrial | Machinery & Equipment | Spectral Genomics |
| Body Surface Translations | Body Surface Translations is a biomedical device company focused on discovery and marketing of imaging technology that can be used to estimate the weight of an animal. The initial target markets will be agribusiness (swine and cattle) but opportunities in other aspects of agriculture and human health are envisioned as well. | Athens | Healthcare | Medical Devices & Equipment | Georgia BioBusiness Center |
| Evirx | Evirx, was formed to commercialize technology based solutions for human performance assessment and accountability (HPAA). Its lead product, Video Analysis Tool (VAT) combines customizable live video and commentary or assessment tools. | Athens | Computer Hardware & Services | Specialty Computer Hardware | Georgia BioBusiness Center |
| Eyelevel Interactive | Eyelevel Interactive offers EI Tag, a branded MAC (mobile action code) that allow consumers to interact with a campaign or promotion displayed on a uniform by linking it to any desired URL. | Greensboro | Mobile & Telecom-munications | Mobile Software & Services | Undisclosed Investors |
| Millenium Cryogenics | Millenium Cryogenics, Inc. aims to provide critical infrastructure needs of the biotech and biomedical industries for the protection and safe storage of valuable biological samples. | Athens | Healthcare | Biotechnology | Georgia BioBusiness Center |
| Natural Science Enterprises | Natural Science Enterprises Inc. is a research and development group dedicated t the understanding of basic biochemical processes with an emphasis on application for treatments. The company has developed a technology platform, a cationic sub-micron emulsion, allowing for a broad pipeline of products for addressing major conditions as well as orphan diseases. | Athens | Healthcare | Drug Discovery | Georgia BioBusiness Center |
| P3 Laboratories | P3 Laboratories aims to provide consulting, development, production, and post-marketing technical support to the pharmaceutical industry for the development of niche products. | Winder | Business Products & Services | Consulting & Outsourcing | Georgia BioBusiness Center |
| Powers Partners | Powers Partners is a manufacturer of overhead distribution transformers, serving utility, industrial and commercial customers in North America, Central America, Mexico, the Caribbean and other markets. | Athens | Energy & Utilities | Electric | Undisclosed Investors |
| Utility Associates | Utility Associates develops and markets software/hardware, turnkey solutions that enable customers with large mobile workforces to significantly increase field operational efficiency and reduce energy consumption. | Covington | Mobile & Telecom-munications | Mobile Software & Services | Braemar Energy Ventures |

Table 17

## Funding Sources

| Funding Source | Source  Type | Funding Type | Eligible  Project(s) | Eligible Applicant(s) |
| --- | --- | --- | --- | --- |
| Georgia Department of Community Affairs – One Georgia Equity | State | Grant | Infrastructure | Governments and government authorities, including multi-county authorities |
| Georgia Department of Community Affairs – One Georgia EDGE | State | Grant | Infrastructure and equipment | Governments and government authorities, including multi-county authorities |
| Appalachian Regional Commission (ARC) | Federal | Grant | Infrastructure | Governments located in Barrow, Elbert, Jackson, and Madison counties |
| U.S. Department of Agriculture (USDA) – Community Connect | Federal | Grant | Infrastructure | Rural governments, nonprofit organizations, for-profit companies |
| U.S. Department of Agriculture (USDA) – Distance Learning & Telemedicine | Federal | Grant | Infrastructure | Rural governments, nonprofit organizations, for-profit companies providing education and medical care |
| U.S. Department of Agriculture (USDA) – Telecommunications Infrastructure Loan Program | Federal | Loan | Infrastructure | Rural governments, nonprofit organizations, for-profit companies providing telephone services |
| U.S. Department of Agriculture (USDA) – Expansion of 911 Access Loan Program (through Telecommunications Infrastructure Loan Program) | Federal | Loan | Emergency communications equipment | Rural governments, nonprofit organizations, for-profit emergency communications equipment providers |
| U.S. Department of Commerce Economic Development Administration (EDA) | Federal | Grant | Infrastructure | Governments |
| Georgia Partnership for Telehealth – Rural School-Based Telehealth Center Initiative | Inde-pendent Nonprofit | Grant | Telemedicine equipment | Nonprofit health centers located in defined Rural Counties [[9]](#footnote-9) |
| Universal Service Administrative Company (USAC) – Rural Health Care (RHC) Program | Inde-pendent Nonprofit | Discount | Telecom-munications services | Healthcare Providers (HCPs) located in defined Rural Areas[[10]](#footnote-10) |
| Athens Angel Fund | Investment Fund | Equity | Early-stage capital | Technology-based start-up companies in the Southeast U.S. |
| Atlanta Technology Angels | Investment Group | Equity | Early-stage capital | Technology-based start-up companies in the Southeast U.S. |
| Georgia BioBusiness Center Venture Lab (University of Georgia) | University Accelerator | Grant, Award, Loan | Seed and early-stage capital | UGA faculty entrepreneurs in biotechnology and life sciences sectors |
| Georgia Venture Partners | Invest-ment Fund | Equity | Seed and early-stage capital | Life science companies with a focus on those located in Georgia |
| Advanced Technology Development Center Venture Lab (Georgia Tech) | University Accelerator | Grant, Award | Seed and early-stage capital | Georgia Tech student and faculty entrepreneurs in technology |
| Georgia Department of Education, Governor’s Office of Student Achievement – Connections for Classrooms | State | Grant | Infrastructure | Public Local Educational Agencies (LEAs) |
| ConnectED Initiative | Private | Grant | Software and training | Schools may apply for software and training grants through private company participants in the Federal initiative[[11]](#footnote-11) |

# Current Project Highlights

The following section describes ongoing or recent digital economy-related projects within the Northeast Georgia region. Each is identified by type:

* “E” = Education/Workforce
* “I” = Infrastructure
* “C” = Capital

The North Georgia Network is proposing to create a fiber route that will travel through Hart and Franklin counties in the Georgia Mountains region and Madison, Jackson and Barrow counties in the Northeast Georgia region to metro Atlanta. The Joint Development Authority of Franklin, Hart and Stephens Counties is seeking funding through the One Georgia Equity Fund program to construct the fiber line between the lateral termination point in Hart County (a substation just south of Royston in Hart County) and Atlanta.

**Project type: I**

Upload Newton was organized for the first time in February 2014 by The Center for Community Preservation and Planning to be a one-day challenge for independent developers and designers to serve local businesses’ web-based needs. Three challenge options were available for participants: design a logo for Franklin Restoration, build a basic website for Church of the Good Shepherd, or develop a mobile application prototype for the Rockdale/Covington News.

**Project type: E, C**

Hack for Athens is an annual two-day event organized in conjunction with the National Day of Civic Hacking and licensed under Random Hacks of Kindness. Web and software developers, designers, community organizers, and other folks from all over Athens-Clarke County gather to tackle local challenges with technology.

**Project type: E, I, C**

The Newton County School System Technology Conference has been held annually since 2010, and was developed for the purpose of offering innovative ideas for implementing technology into every classroom in Newton County.

**Project type: E**

Rails Girls Athens was organized by local volunteers for the first time in April 2014. As part of an international Rails Girls initiative, Rails Girls Athens aims to open up technology and make it more approachable for girls and women by teaching Ruby on Rails over the course of a weekend workshop event. A Meetup.com group, created to maintain the momentum of the event, holds monthly meetings in Athens-Clarke County to learn and teach the Ruby on Rails coding language via collaborative projects.

**Project type: E**

Many Northeast Georgia school districts are adopting Bring Your Own Technology/Bring Your Own Device (BYOT/BYOD) policies and implementing One-to-One (1:1) initiatives to encourage digital learning in classrooms.

**Project type: E**

Four Athens is a technology incubator located in downtown Athens-Clarke County. It was formed to provide physical workspace, shared amenities, mentorship, and guidance to technology-related business start-ups.

**Project type: E, I, C**

The Georgia BioBusiness Center (GBBC) is a bioscience and technology incubator located on the main University of Georgia campus in Athens-Clarke County. With a focus on academic entrepreneurship, the GBBC encourages “the commercialization of UGA faculty, staff, and student discoveries in the fields of medicine, agriculture, bioinformatics and environmental science.” (sourced on 6/30/14 from <http://www.ovpr.uga.edu/gbbc/>)

**Project type: E, I, C**

The New Media Institute (NMI) is a teaching and research unit within the University of Georgia Grady College of Journalism and Mass Communication with a focus on digital media technology. The NMI offers a New Media Interdisciplinary Certificate, demonstrating to future employers a mastery of technology as applied within a student’s chosen field.

**Project type: E**

Several Northeast Georgia communities are interested in potentially offering broadband services directly to citizens. Commerce will soon conduct a study to this effect, and the Oxford listed the effort as a line item in the 2013-2018 Short-Term Work Program of its comprehensive plan. A group of stakeholders in Athens-Clarke County is researching methods for getting internet services to low-income neighborhoods. Currently in Northeast Georgia, the cities of Elberton and Monroe offer municipal broadband. (See the Section III Appendix for summaries of interviews with the Elberton and Monroe broadband utility providers.) All four of these communities (along with the Covington, Mansfield, and Monticello), as public power utilities, are members of the Municipal Electric Authority of Georgia (MEAG) and Electric Cities of Georgia (ECG).

**Project type: I, E**

The mission of the Athens chapter of the Technology Association of Georgia (TAG) is “educating, uniting, promoting, and influencing Georgia's technology community in the Athens area.” (sourced on 6/30/14 from <http://www.tagonline.org/chapters-and-societies/athens/>) The TAG Athens Board of Directors comprises local elected officials as well as university, nonprofit, and private sector representatives.

**Project type: E**

***Previous Efforts***

In 2009, the Athens-Clarke Economic Development Foundation (absorbed in 2013 by the newly-created Athens-Clarke Economic Development Department) applied for a federal grant to develop Northeast Georgia Net, a project calling for $3.2 million to develop wireless Internet networks covering 29 cities in Clarke, Barrow, Jackson, Madison, Oconee and Oglethorpe counties. The project was not funded.

**Project type: I**

# SWOC

The following table depicts the major Strengths, Weaknesses, Opportunities, and Challenges of the digital economy in Northeast Georgia, as gleaned from stakeholders during the planning process. Items identified by NEGRC staff as most critical to the region are highlighted.

Table 18

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Education/Workforce** | **Infrastructure** | **Capital** |
| **Strengths** | **3** | **5** | **3** |
| Level of apparent wireless coverage throughout the region; Only 0.019% regional population unserved |  | **x** |  |
| Level of apparent wireline coverage throughout the region; Only 5.04% regional population unserved |  | **x** |  |
| K-12 school systems utilizing new mobile technologies for instruction | **x** |  |  |
| Two Northeast Georgia cities (Monroe and Elberton) offer municipal broadband access to residents |  | **x** |  |
| Two existing technology-related business incubators are located in Athens-Clarke County (FourAthens, Georgia BioBusiness Center) |  |  | **x** |
| 99% of business respondents to DEP questionnaire have access to the internet at their location |  | **x** |  |
| Nearly 100% of resident respondents to the DEP questionnaire have an Internet-enabled device at home |  | **x** |  |
| UGA-Carl Vinson Institute’s Office of Information Technology Outreach Services (ITOS) as a resource | **x** |  |  |
| Basic computer classes offered at libraries, Athens Technical College, and Lanier Technical College campuses | **x** |  |  |
| Northeast GA region projected to grow manufacturing tech, information tech (IT), and other tech jobs at faster rate than the state through 2021 |  |  | **x** |
| Region has competitive advantage in the state for manufacturing tech occupations and for various life, physical, and social science occupations |  |  | **x** |
| **Weaknesses** | **1** | **6** | **0** |
| Major wireline coverage gaps: Morgan (35.73% unserved); Jasper (28.59% unserved); Elbert (20.42% unserved); Greene (17.58% unserved); Madison (16.42% unserved); Oglethorpe (11.18% unserved) |  | **x** |  |
| Approximately 45% of the existing connections are via DSL; coverage for cable is relegated primarily to the western part of the region and surrounding county seats |  | **x** |  |
| Limited choice of internet service providers (ISPs) based on location; in most counties, there are two main competing ISPs |  | **x** |  |
| Limited choice of broadband type for businesses and residents based on location |  | **x** |  |
| Minimal participation by local government officials in the digital economy stakeholder engagement process | **x** |  |  |
| 51% of business respondents and 43% of resident respondents to the DEP questionnaire recently experienced non-weather related service disruptions lasting from 1 hour to 1 day |  | **x** |  |
| 45% of resident respondents to the DEP questionnaire think their internet speed is “okay;” 24% find it to be slow or “severely limiting” |  | **x** |  |
| **Opportunities** | **5** | **3** | **2** |
| 63% of business respondents and 53% of resident respondents to the DEP questionnaire presume there will be a need to increase internet speed within the next 2 years |  | **x** |  |
| Growing demand for qualified IT professionals | **x** |  |  |
| Need for planning and coordination amongst local and regional organizations and agencies | **x** | **x** | **x** |
| Need for technical assistance and support for local and regional organizations and agencies | **x** |  |  |
| Need for affordable training on utilization/deployment of digital technologies | **x** |  |  |
| Recently revised Georgia Department of Community Affairs local comprehensive planning guidelines encourage communities to develop specialized plans; relevant examples might include local digital economy, technology, and wireless facility plans | **x** | **x** | **x** |
| **Challenges** | **1** | **5** | **2** |
| Pace of technology changes/updates is overwhelming | **x** |  |  |
| Hardware, software, and service affordability; gap exists between what people expect from service (access, speed, etc.) and what they are willing/able to pay to ISPs |  | **x** |  |
| End of support for Microsoft Windows XP will require replacement of incompatible computers |  | **x** | **x** |
| Rural technology-related and Internet-based businesses long-term outlook is critically threatened by lack of reliable and efficient broadband infrastructure |  | **x** |  |
| Limited state and federal grant funding for digital economy projects |  |  | **x** |
| Mobile BILD Act (HB 176) places stricter procedural standards on local governments regarding regulation of location, construction, collocation, modification, and operation of wireless facilities |  | **x** |  |
| Accuracy of broadband coverage data limited to two (2) square miles; at smaller geographies, ISPs report coverage along roads even if only one of many residences is served |  | **x** |  |

# Strategic Focus Areas

**SFA 1: Incorporate digital technology plan elements into the local comprehensive planning process.**

As of March 1, 2014, the local comprehensive planning standards for Georgia counties and cities encourage the development of “optional” plan elements to address specific community needs that extend above and beyond the minimum requirements. Communities in Northeast Georgia are encouraged to opt for the inclusion of digital technology plan elements into local comprehensive plan documents. Such elements may address the following:

* Wireline infrastructure coverage
* Mobile broadband infrastructure (cell tower) location and design
* Hardware and software update/replacement schedule
* Staff training/education
* Social media procedures
* Electronic records management
* Website development and maintenance
* Online payment services
* Policies and ordinances

Upon completion of the digital technology plan element, a local government may identify broadband infrastructure and facility needs within the capital improvements element (CIE).

Steps:

1. Determine comprehensive plan deadline at [www.georgiaplanning.com](http://www.georgiaplanning.com).
2. Select planning process facilitator.[[12]](#footnote-12)
3. Identify *Needs and Opportunities* specific to digital technology.
4. Incorporate implementation strategies for addressing digital technology *Needs and Opportunities* into the *Community Work Program*.
5. Adopt comprehensive plan.

Technical Assistance Resources:

* Georgia Department of Community Affairs (DCA)
* NEGRC
* University of Georgia Carl Vinson Institute
* Utility managers
* Informational technology (IT) staff
* Local web developers

**SFA 2: Develop “dig once” policies for local adoption.**

"Dig once" policies or ordinances refer to requirements designed to reduce the number and scale of repeated excavations for the installation and maintenance of broadband utilities in public right-of-way (ROW).[[13]](#footnote-13)

The State of Georgia does not currently operate under a “dig once” policy for state highway construction projects. However, counties and cities in Northeast Georgia are encouraged to adopt “dig once” policies for local road and utility ROWs. Such local policies or ordinances would facilitate coordination between government departments (e.g. public works, utilities, planning, and transportation) and wireline broadband providers during the ROW project development stage, and should reference and comply with utility guides published by the American Association of State Highway and Transportation Officials (AASHTO).

**SFA 3: Develop regional coordination and sharing agreements for technologies and infrastructure.**

Examples may include:

* + Software product subscriptions
  + Data and geographic information systems
  + Wireline infrastructure development

Coordination and sharing between counties and cities in Northeast Georgia may result in significant cost savings to local governments. Additionally, projects that are regional in nature and involve multiple stakeholders are often viewed as attractive to both public and private funding sources. Such agreements may be developed through multi-county authorities and/or facilitated by NEGRC.

Technical Assistance Resources:

* Multi-county authorities
* NEGRC
* Utility managers

**SFA 4: Identify specific training and education needs at an organization/agency level, and develop programs to address those needs.**

Stakeholders representing local government organizations and institutions identified a need, generally, for training and education opportunities on a range of digital technologies, including software applications (e.g., geographic information systems (GIS), public safety operations, public administration, and utility management) and social media tools (e.g., Twitter, Facebook, and Tumblr). With instruction on their use, these technologies enable agencies to realize financial and temporal efficiencies.

Steps:

1. Identify all digital tools that are currently or will be used by the agency.
2. Determine comfort level of staff persons responsible for using each tool.
3. Seek out training and education opportunities to address knowledge.

Technical Assistance Resources:

* University of Georgia Carl Vinson Institute's Office of Information Technology Outreach Services (ITOS)
* NEGRC

Table 19

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Strategy | Estimated Timeframe | Responsible Parties | Estimated Cost | Possible Funding Sources |
| SFA 1 | Varies depending on community planning deadlines | County and city governments | $1,000-5,000 (NEGRC) | General fund |
| SFA 2 | Two to six months | County and city governments | Minimal (staff time) | General fund |
| SFA 3 | Ongoing, as needs arise | County and city governments, joint development authorities, NEGRC | Minimal (staff time) | General fund |
| SFA 4 | Ongoing, as needs arise | County and city governments, ITOS, NEGRC | To be determined based on training/education needs | General fund, private foundation grants, DCA-NEGRC planning services contract |

1. For comparison, please reference the *Northeast Georgia Plan 2035 – Regional Assessment*, p. 15-19. This document is available through the NEGRC website at <http://www.negrc.org/resource-1.php?page_ID=1294178146> [↑](#footnote-ref-1)
2. For comparison, please reference the *2012 Northeast Georgia Comprehensive Economic Development Strategy* available through the NEGRC website at: <http://www.negrc.org/resource-1.php?page_ID=1389969106> [↑](#footnote-ref-2)
3. Georgia Department of Education [↑](#footnote-ref-3)
4. Georgia Independent School Association [↑](#footnote-ref-4)
5. [↑](#footnote-ref-5)
6. “Since the census block is the smallest geographic unit for which the U.S. Census collects aggregate data, if a provider offers availability to any location within a census block less than two square miles, we estimate household or population coverage will include the entire block, even though it is possible that some areas are not covered.” Retrieved on July 29, 2014 from the Technical Overview page of the National Broadband Map website at <http://www.broadbandmap.gov/about/technical-overview/assembling-the-data>. [↑](#footnote-ref-6)
7. Madison, Oglethorpe, Elbert, Oconee, Morgan, Greene, and Jasper. [↑](#footnote-ref-7)
8. For more information about these, please refer to the funding sources section of this document. [↑](#footnote-ref-8)
9. Georgia’s Rural Counties as identified by the State Office of Rural Health: <https://dch.georgia.gov/sites/dch.georgia.gov/files/related_files/document/Georgia%27s%20Rural%20Counties-April%202014.pdf>. [↑](#footnote-ref-9)
10. Eligible Rural Areas search-by-state tool: <http://www.usac.org/rhc/telecommunications/tools/Rural/search/search.asp>. [↑](#footnote-ref-10)
11. Additional information on the White House ConnectED Initiative:

    [http://www.whitehouse.gov/issues/education/k-12/connected#schools](http://www.whitehouse.gov/issues/education/k-12/connected%23schools). [↑](#footnote-ref-11)
12. Per the most recently-adopted Local Planning Requirements, Regional Commissions are able to prepare the three core elements (Community Goals, Needs and Opportunities, Community Work Program) at no cost to the local government. A small fee may be charged for preparation of additional plan elements. [↑](#footnote-ref-12)
13. Retrieved from the FHWA website on June 26, 2014 at <http://www.fhwa.dot.gov/policy/otps/exeorder.cfm>. [↑](#footnote-ref-13)